# $10 / 543003$ <br> JC14 Rec'd PCT/PTO 22 JUL 2005 

SEQUENCE LISTING

```
<110> Ono, Yuichi
        Nakagawa, Yasuko
        Sakamoto, Yoshimasa
<120> Lrp4/Corin DOPAMINERGIC NEURON
    PROLIFERATIVE PROGENITOR CELL MARKERS
```

```
<130> 082368-004900US
<150> PCT/JP04/000629
<151> 2004-01-23
<150> JP 2003-016790
<151> 2003-01-24
<160> 14
<170> FastSEQ for Windows Version 4.0
```

<210> 1
<211> 4864
$<212>$ DNA
<213> Mus musculus
<400> 1
ctagtcccca ggcagacggt ccctcactcc tgtggcttgg cgtcggagac gctggcagtc


| tggaaagtgg | tatttggcat | aaacaacctg | gaccatccat | caggcttcat | gcagacccgc | 2880 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tttgtgaaga | ccatcotgct | acatccocgt | tacagtcgag | cagtggtaga | ctatgatatc | 2940 |
| agcgtggtgg | agctgagcga | tgatatcaat | gagacaagct | acgtcagacc | tgtctgccta | 3000 |
| cocagtcogg | aggagtatct | agaaccagat | acgtactgct | acatcacagg | ctggggccac | 3060 |
| atgggcaata | aaatgccett | taagctgcag | gagggagagg | tccgcattat | ccetctggag | 3120 |
| cagtgcoagt | cctattttga | catgaagacc | atcaccaatc | ggatgatctg | tgctggctat | 3180 |
| gagtctggca | cogtggactc | ctgcatggga | gacagcggtg | ggcetctggt | ttgtgaacga | 3240 |
| cocggaggac | agtggacatt | atttggttta | acttcatggg | gctccgtctg | cttttccaaa | 3300 |
| gttctgggac | ctggagtgta | cagcaatgtg | tottactttg | tgggctggat | tgaaagacaa | 3360 |
| atatatatcc | agacctttct | ccaaaagaaa | tcccaaggat | aatcagagac | tttgtgggga | 3420 |
| aacctacatg | gagaatgacc | ctctgaaaca | gaagcttgtc | ctgccaagag | ctgtacgaac | 3480 |
| aggcgtttca | cggacaggac | gctcaacatg | caccgcaaga | tctctcctgt | ttgtgctaga | 3540 |
| tgagttttac | tcaggcttta | atctctttca | acattatcat | ttattaattt | catgaatcct | 3600 |
| tttaaaagca | cagagcaaag | taggttttgt | tattttgcta | ggctaacctt | gaatgtagtg | 3660 |
| tgcaattacc | a acccataga | gacatttgga | gctctagggt | aacaagttat | agaaagctcc | 3720 |
| ttttattact | actacaagac | acacacggag | atacacgctg | actgatctcc | agtttctgct | 3780 |
| taagcccagt | ggcttagggg | gcacatttca | gaactgatct | tggagactgg | cttttaattt | 3840 |
| gtagaaagcc | aagagaatat | atatgctttt | attatttact | ctactcttct | aaataacttg | 3900 |
| aagaaatcat | gaaagacaga | gaaaggaccc | acagtgttga | tctagacagt | tgaagttgca | 3960 |
| agaatgtaaa | attctctagc | caaccaaact | aacactctga | agtaagtaga | attctatcct | 4020 |
| ttctgtattc | aaattaagct | taaaatctcc | accagatttg | ttcccgttac | tgggaatttt | 4080 |
| cggagtatgt | cacttagatg | actgtgatgt | caaaagccag | gtcaatcctt | gaggaaataa | 4140 |
| tttgtttgct | tatgtgggaa | tgaataagaa | tctttccatt | ccgcaaaaca | cacaaattaa | 4200 |
| aaaggagaaa | aaaaattaaa | taacattcca | cacccaatta | attctgaaaa | ttagtctgct | 4260 |
| tgtattcacc | caaaacagaa | aagttacaga | aatatatttc | aaagtgcagc | aaaatgttgc | 4320 |
| atggagtata | taacattttg | caatttcccc | ctcatgatgt | ctaacatccg | gtattgccat | 4380 |
| ttgcctcatt | gataattaaa | actaaatttt | aaggatgctt | ttaagcactg | ggccacttta | 4440 |
| tgggaatcaa | ttccoaagc | aattagtggt | tacaagtatt | ttttcccact | aaaaagtttc | 4500 |
| aaaacacaaa | cottcatact | aaattaatta | gccagacatg | aactatgtaa | catgcaaatg | 4560 |
| cctttttgaa | caagtaggat | gcactgttaa | acttcaccag | caaccaaact | gcotcagtat | 4620 |




| tgcttttcca | aagtcctggg | gcctggcgtt | tatagtaatg | tgtcatattt | cgtcgatgg | 3180 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| attaaaagac | agatttacat | ccagaccttt | ctcctaaact | aattataagg | atgatcagag | 3240 |
| acttttgcca | gctacactaa | aagaaaatgg | ccttcttgac | tgtgaagagc | tgcetgcaga | 3300 |
| gagctgtaca | gaagcacttt | tcatggacag | aaatgctcaa | tcgtgcactg | caaatttgca | 3360 |
| tgtttgtttt | ggactaattt | ttttcaattt | attttttcac | cttcattttt | ctcttattec | 3420 |
| aagttcaatg | aaagacttta | caaaagcaaa | caaagcagac | tttgtccttt | tgccaggcet | 3480 |
| aaccatgact | gcagcacaaa | attatcgact | ctggcgagat | ttaaaatcag | gtgctacagt | 3540 |
| aacaggttat | ggaatggtct | cttttatcct | atcacaaaaa | aagacataga | tatttaggct | 3600 |
| gattaattat | ctctaccagt | ttttgtttct | caagctcagt | gcatagtggt | aaatttcagt | 3660 |
| gttaacattg | gagacttgct | tttcttttc | ttttttata | ccccacaatt | cttttttatt | 3720 |
| acacttcgaa | ttttagggta | cacgagcaca | acgtgcaggt | tagttacata | tgtatacatg | 3780 |
| tgccatgttg | gtgtgctgaa | cocagtaact | cgtcatttga | tttattaaaa | gccaagataa | 3840 |
| tttacatgtt | taaagtattt | actattaccc | ccttctaatg | tttgcataat | tctgagaact | 3900 |
| gataaaagac | agcaataaaa | gaccagtgtc | atccatttag | gtagcaagac | atattgaatg | 3960 |
| caaagttctt | tagatatcaa | tattaacact | tgacattatt | ggacccocca | ttctggatgt | 4020 |
| atatcaagat | cataatttta | tagaagagtc | tctatagaac | tgtcctcata | gctgggtttg | 4080 |
| ttcaggatat | atgagttggc | tgattgagac | tgcaacaact | acatctatat | ttatgggcaa | 4140 |
| tattttgttt | tacttatgtg | gcaaagaact | ggatattaaa | ctttgcaaaa | gagaatttag | 4200 |
| atgagagatg | caatttttta | aaaagaaaat | taatttgcat | coctcgttta | attaaattta | 4260 |
| tttttcagtt | ttcttgcgtt | catccatacc | aacaaagtca | taaagagcat | attttagagc | 4320 |
| acagtaagac | tttgcatgga | gtaaaacatt | ttgtaatttt | cctcaaaaga | tgtttaatat | 4380 |
| ctggtttctt | ctcattggta | attaaaattt | tagaaatgat | ttttagctct | aggccacttt | 4440 |
| acgcaactca | atttctgaag | caattagtgg | taaaaggtat | ttttccccac | taaaaaactt | 4500 |
| taaaacacaa | atcttcatat | atacttaatt | taattagtca | ggcatccatt | ttgcctttta | 4560 |
| aacaactagg | attccctact | aacctccacc | agcaacctgg | actgcctcag | cattccaat | 4620 |
| agatactacc | tgcaatttta | tacatgtatt | tttgtatctt | ttctgtgtgt | aaacatagtt | 4680 |
| gaaattcaaa | aagttgtagc | aatttctata | ctattcatct | cetgtccttc | agtttgtata | 4740 |
| aacctaagga | gagtgtgaaa | tccagcaact | gaattgtggt | cacgattgta | tgaaagttca | 4800 |
| agaacatatg | tcagttttgt | tacagttgta | gctacatact | caatgtatca | acttttagcc | 4860 |
| tgctcaactt | aggctcagtg | aaatatatat | attatactta | ttttaaataa | ttcttaatac | 4920 |

```
<210> 3
<211> 1113
<212> PRT
<213> Mus musculus
<400> 3
Met Gly Arg Val Ser Phe Ser Val Arg Val Ser Ser Val Arg Arg Ala
1 5 10}1
Arg Cys Ser Cys Pro Gly Arg Cys Tyr Leu Ser Cys Arg Val Pro Pro
Thr Thr Ala Leu Arg Ala Leu Asn Gly Leu Gly Cys Ala Gly Val Pro
Gly Glu Thr Ala Gly Gly Ala Val Gly Pro Gly Pro Leu Gly Thr Arg
Gly Phe Leu Ser Gly Ser Lys Phe Gln Ala Pro Gly Ser Trp Lys Asp
65 70 75 80
Cys Phe Gly Ala Pro Pro Ala Pro Asp Val Leu Arg Ala Asp Arg Ser
                85 90 95
Val Gly Glu Gly Cys Pro Gln Lys Leu Val Thr Ala Asn Leu Leu Arg
                100 105 110
Phe Leu Leu Leu Val Leu Ile Pro Cys Ile Cys Ala Leu Ile Val Leu
Leu Ala Ile Leu Leu Ser Phe Val Gly Thr Leu Lys Arg Val Tyr Phe
Lys Ser Asn Asp Ser Glu Pro Leu Val Thr Asp Gly Glu Ala Arg Val
145 150 155 160
Pro Gly Val Ile Pro Val Asn Thr Val Tyr Tyr Glu Asn Thr Gly Ala
Pro Ser Leu Pro Pro Ser Gln Ser Thr Pro Ala Trp Thr Pro Arg Ala
Pro Ser Pro Glu Asp Gln Ser His Arg Asn Thr Ser Thr Cys Met Asn
Ile Thr His Ser Gln Cys Gln Ile Leu Pro Tyr His Ser Thr Leu Ala
        210 215 220
Pro Leu Leu Pro Ile Val Lys Asn Met Asp Met Glu Lys Phe Leu Lys
225 230 235 240
Phe Phe Thr Tyr Leu His Arg Leu Ser Cys Tyr Gln His Ile Leu Leu
                        245 250 255
Phe Gly Cys Ser Leu Ala Phe Pro Glu Cys Val Val Asp Gly Asp Asp
                        260 265 270
```

| Arg | His | $\begin{aligned} & \text { Gly } \\ & 275 \end{aligned}$ | Leu | Leu | Pro | Cys | $\begin{aligned} & \text { Arg } \\ & 280 \end{aligned}$ | Ser | Phe | Cys | Glu | $\begin{aligned} & \text { Ala } \\ & 285 \end{aligned}$ | Ala | Lys | Glu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gly | $\begin{aligned} & \text { Cys } \\ & 290 \end{aligned}$ | Glu | Ser | Val | Leu | $\begin{aligned} & \text { Gly } \\ & 295 \end{aligned}$ | Met | Val | Asn | Ser | $\begin{aligned} & \text { Ser } \\ & 300 \end{aligned}$ | Trp | Pro | Asp | Ser |
| Leu 305 | Arg | Cys | Ser | Gln | Phe $310$ | Arg | Asp | His | Thr | $\begin{aligned} & \text { Glu } \\ & 315 \end{aligned}$ | Thr | Asn | Ser | Ser | $\begin{aligned} & \text { Val } \\ & 320 \end{aligned}$ |
| Arg | Lys | Ser | Cys | $\begin{aligned} & \text { Phe } \\ & 325 \end{aligned}$ | Ser | Leu | Gln | Gln | $\begin{aligned} & \text { Glu } \\ & 330 \end{aligned}$ | His | Gly | Lys | Gln | $\begin{aligned} & \text { Ser } \\ & 335 \end{aligned}$ | Leu |
| Cys | Gly | Gly | $\begin{aligned} & \text { Gly } \\ & 340 \end{aligned}$ | Glu | Ser | Phe | Leu | $\begin{aligned} & \text { Cys } \\ & 345 \end{aligned}$ | Thr | Ser | Gly | Leu | $\begin{aligned} & \text { Cys } \\ & 350 \end{aligned}$ | Val | Pro |
| Lys | Lys | $\begin{aligned} & \text { Leu } \\ & 355 \end{aligned}$ | Gln | Cys | Asn | Gly | $\begin{aligned} & \text { Tyr } \\ & 360 \end{aligned}$ | Asn | Asp | Cys | Asp | $\begin{aligned} & \text { Asp } \\ & 365 \end{aligned}$ | Trp | Ser | Asp |
| Glu | $\begin{aligned} & \text { Ala } \\ & 370 \end{aligned}$ | His | Cys | Asn | Cys | $\begin{aligned} & \text { Ser } \\ & 375 \end{aligned}$ | Lys | Asp | Leu | Phe | $\begin{aligned} & \text { His } \\ & 380 \end{aligned}$ | Cys | Gly | Thr | Gly |
| $\begin{aligned} & \text { Lys } \\ & 385 \end{aligned}$ | Cys | Leu | His | Tyr | $\begin{aligned} & \text { Ser } \\ & 390 \end{aligned}$ | Leu | Leu | Cys | Asp | $\begin{aligned} & \text { Gly } \\ & 395 \end{aligned}$ | Tyr | Asp | Asp | Cys | $\begin{aligned} & \text { Gly } \\ & 400 \end{aligned}$ |
| Asp | Pro | Ser | Asp | $\begin{aligned} & \text { Glu } \\ & 405 \end{aligned}$ | Gln | Asn | Cys | Asp | $\begin{aligned} & \text { Cys } \\ & 410 \end{aligned}$ | Asn | Leu | Thr | Lys | $\begin{aligned} & \text { Glu } \\ & 415 \end{aligned}$ | His |
| Arg | Cys | Gly | $\begin{aligned} & \text { Asp } \\ & 420 \end{aligned}$ | Gly | Arg | Cys | Ile | $\begin{aligned} & \text { Ala } \\ & 425 \end{aligned}$ | Ala | Glu | Trp | al | $\begin{aligned} & \text { Cys } \\ & 430 \end{aligned}$ | Asp | Gly |
| Asp | His | $\begin{aligned} & \text { Asp } \\ & 435 \end{aligned}$ | Cys | Val | Asp | Lys | $\begin{aligned} & \text { Ser } \\ & 440 \end{aligned}$ | Asp | Glu | Val | Asn | $\begin{aligned} & \text { Cys } \\ & 445 \end{aligned}$ | Ser | Cys | His |
| Ser | $\begin{aligned} & \text { Gln } \\ & 450 \end{aligned}$ | Gly | Leu | Val | Glu | $\begin{aligned} & \text { Cys } \\ & 455 \end{aligned}$ | Thr | Ser | Gly | Gln | Cys <br> 460 | Ile | Pro | Ser | Thr |
| Phe $465$ | Gln | Cys | Asp | Gly | Asp <br> 470 | Glu | Asp | Cys | Lys | $\begin{aligned} & \text { Asp } \\ & 475 \end{aligned}$ | Gly | Ser | Asp | Glu | $\begin{aligned} & \text { Glu } \\ & 480 \end{aligned}$ |
| Asn | Cys | Ser | Asp | $\begin{aligned} & \text { Ser } \\ & 485 \end{aligned}$ | Gln | Thr | Pro | Cys | $\begin{aligned} & \text { Pro } \\ & 490 \end{aligned}$ | Glu | Gly | Glu | Gln | $\begin{aligned} & \text { Gly } \\ & 495 \end{aligned}$ | Cys |
| Phe | Gly | Ser | $\begin{aligned} & \text { Ser } \\ & 500 \end{aligned}$ | Cys | Val | Glu | Ser | $\begin{aligned} & \text { Cys } \\ & 505 \end{aligned}$ | Ala | Gly | Ser | Ser | Leu 510 | Cys | Asp |
| Ser | Asp | $\begin{aligned} & \text { Ser } \\ & 515 \end{aligned}$ | Ser | Leu | Ser | Asn | $\begin{aligned} & \text { Cys } \\ & 520 \end{aligned}$ | Ser | Gln | Cys | Glu | $\begin{aligned} & \text { Pro } \\ & 525 \end{aligned}$ | Ile | Thr | Leu |
| Glu | $\begin{aligned} & \text { Leu } \\ & 530 \end{aligned}$ | Cys | Met | Asn | Leu | Leu $535$ | Tyr | Asn | His | Thr | $\begin{aligned} & \text { His } \\ & 540 \end{aligned}$ | Tyr | Pro | Asn | Tyr |
| Leu <br> 545 | Gly | His | Arg | Thr | $\begin{aligned} & \text { Gln } \\ & 550 \end{aligned}$ | Lys | Glu | Ala | Ser | $\begin{aligned} & \text { Ile } \\ & 555 \end{aligned}$ | Ser | Trp | Glu | Ser | $\begin{aligned} & \text { Ser } \\ & 560 \end{aligned}$ |
| Leu | Phe | Pro | Ala | $\begin{aligned} & \text { Leu } \\ & 565 \end{aligned}$ | Val | Gln | Thr | Asn | $\begin{aligned} & \text { Cys } \\ & 570 \end{aligned}$ | Tyr | Lys | Tyr | Leu | $\begin{gathered} \text { Met } \\ 575 \end{gathered}$ | Phe |
| Phe | Ala | Cys | Thr <br> 580 | Ile | Leu | Val | Pro | $\begin{aligned} & \text { Lys } \\ & 585 \end{aligned}$ | Cys | Asp | Val | Asn | $\begin{aligned} & \text { Thr } \\ & 590 \end{aligned}$ | Gly | Gln |





|  |  |  |  | 405 |  |  |  |  | 410 |  |  |  |  | 415 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ile | Gln | Thr | $\begin{aligned} & \text { Ser } \\ & 420 \end{aligned}$ | Cys | Gln | Glu | Gly | $\begin{aligned} & \text { Asp } \\ & 425 \end{aligned}$ | Gln | Arg | Cys |  | $\begin{aligned} & \text { Tyr } \\ & 430 \end{aligned}$ |  | Pro |
| Cys | Leu | Asp <br> 435 | Ser | Cys | Gly | Gly | $\begin{aligned} & \text { Ser } \\ & 440 \end{aligned}$ |  | Leu | Cys |  | $\begin{aligned} & \text { Pro } \\ & 445 \end{aligned}$ | Asn | Asn | Ser |
| Leu | $\begin{aligned} & \text { Asn } \\ & 450 \end{aligned}$ | Asn | Cys | Ser | Gln | $\begin{aligned} & \text { Cys } \\ & 455 \end{aligned}$ | Glu | Pro | Ile | Thr | Leu | Glu | Leu | Cys | Met |
| $\begin{aligned} & \text { Asn } \\ & 465 \end{aligned}$ | Leu | Pro | Tyr | Asn | $\begin{aligned} & \text { Ser } \\ & 470 \end{aligned}$ | Thr | Ser | Tyr | Pro | $\begin{aligned} & \text { Asn } \\ & 475 \end{aligned}$ | Tyr | Phe | Gly | His | $\begin{aligned} & \text { Arg } \\ & 480 \end{aligned}$ |
| Thr | Gln | Lys | Glu | $\begin{aligned} & \text { Ala } \\ & 485 \end{aligned}$ | Ser | Ile | Ser | $\operatorname{Trp}$ | $\begin{aligned} & \text { Glu } \\ & 490 \end{aligned}$ | Ser | Ser | Leu | Phe | $\begin{aligned} & \text { Pro } \\ & 495 \end{aligned}$ | Ala |
| Leu | Val | Gln | $\begin{aligned} & \text { Thr } \\ & 500 \end{aligned}$ | Asn | Cys | Tyr | Lys | $\begin{aligned} & \text { Tyr } \\ & 505 \end{aligned}$ | Leu | Met | Phe | Phe | $\begin{aligned} & \text { Ser } \\ & 510 \end{aligned}$ | Cys | Thr |
| Ile | Leu | $\begin{aligned} & \text { Val } \\ & 515 \end{aligned}$ | Pro | Lys | Cys | Asp | $\begin{aligned} & \text { Val } \\ & 520 \end{aligned}$ | Asn | Thr | Gly | Glu | $\begin{aligned} & \text { Arg } \\ & 525 \end{aligned}$ | Ile | Pro | Pro |
| Cys | $\begin{aligned} & \text { Arg } \\ & 530 \end{aligned}$ | Ala | Leu | Cys | Glu | $\begin{aligned} & \text { His } \\ & 535 \end{aligned}$ | Ser | Lys | Glu | Arg | $\begin{aligned} & \text { Cys } \\ & 540 \end{aligned}$ | Glu | Ser | Val | Leu |
| $\begin{aligned} & \text { Gly } \\ & 545 \end{aligned}$ | Ile | Val | Gly | Leu | Gln | Trp | Pro | Glu | Asp | $\begin{aligned} & \text { Thr } \\ & 555 \end{aligned}$ | Asp | Cys | Ser | Gln | Phe |
| Pro | Glu | Glu | Asn | $\begin{aligned} & \text { Ser } \\ & 565 \end{aligned}$ | Asp | Asn | Gln | Thr | $\begin{aligned} & \text { Cys } \\ & 570 \end{aligned}$ | Leu | Met | Pro | Asp | $\begin{aligned} & \text { Glu } \\ & 575 \end{aligned}$ | Tyr |
| Val | Glu | Glu | $\begin{aligned} & \text { Cys } \\ & 580 \end{aligned}$ | Ser | Pro | Ser | His | $\begin{aligned} & \text { Phe } \\ & 585 \end{aligned}$ | Lys | Cys | Arg | Ser | $\begin{aligned} & \text { Gly } \\ & 590 \end{aligned}$ | Gln | Cys |
| Val | Leu | $\begin{aligned} & \text { Ala } \\ & 595 \end{aligned}$ | Ser | Arg | Arg | Cys | $\begin{aligned} & \text { Asp } \\ & 600 \end{aligned}$ | Gly | Gln | Ala | Asp | $\begin{aligned} & \text { Cys } \\ & 605 \end{aligned}$ | Asp | Asp | Asp |
| Ser | $\begin{aligned} & \text { Asp } \\ & 610 \end{aligned}$ | Glu | Glu | Asn | Cys | $\begin{aligned} & \text { Gly } \\ & 615 \end{aligned}$ | Cys | Lys | Glu | Arg | $\begin{aligned} & \text { Asp } \\ & 620 \end{aligned}$ | Leu | Trp | Glu | Cys |
| $\begin{aligned} & \text { Pro } \\ & 625 \end{aligned}$ | Ser | Asn | Lys | Gln | $\begin{aligned} & \text { Cys } \\ & 630 \end{aligned}$ | Leu | Lys | His |  | $\begin{aligned} & \text { Val } \\ & 635 \end{aligned}$ | Ile | Cys | Asp | Gly | $\begin{aligned} & \text { Phe } \\ & 640 \end{aligned}$ |
| Pro | Asp | Cys | Pro | Asp <br> 645 | Tyr | Met | Asp | Glu | $\begin{aligned} & \text { Lys } \\ & 650 \end{aligned}$ | Asn | Cys | Ser | Phe | $\begin{aligned} & \text { Cys } \\ & 655 \end{aligned}$ | G1n |
| Asp | Asp | Glu | $\begin{aligned} & \text { Leu } \\ & 660 \end{aligned}$ | Glu | Cys | Ala | Asn | $\begin{aligned} & \mathrm{His} \\ & 665 \end{aligned}$ | Ala | Cys | Val |  | $\begin{aligned} & \text { Arg } \\ & 670 \end{aligned}$ | Asp | Leu |
| Trp | Cys | Asp $675$ | Gly | Glu | Ala | Asp | $\begin{aligned} & \text { Cys } \\ & 680 \end{aligned}$ | Ser |  | Ser |  | Asp <br> 685 | Glu | Trp | Asp |
| Cys | $\begin{aligned} & \text { Val } \\ & 690 \end{aligned}$ |  |  |  |  | $\begin{aligned} & \text { Asn } \\ & 695 \end{aligned}$ | Val |  |  |  | $\begin{aligned} & \text { Ser } \\ & 700 \end{aligned}$ | Phe | Leu | Met | Val |
| $\begin{aligned} & \text { His } \\ & 70.5 \end{aligned}$ | Arg | Ala | Ala | Thr | $\begin{aligned} & \text { Glu } \\ & 710 \end{aligned}$ | His | His | Val | Cys | $\begin{aligned} & \text { Ala } \\ & 715 \end{aligned}$ | Asp | Gly | Trp | Gln | $\begin{aligned} & \text { Glu } \\ & 720 \end{aligned}$ |
| Ile | Leu | Ser | Gln | $\begin{aligned} & \text { Leu } \\ & 725 \end{aligned}$ | Ala | Cys | Lys | Gln | $\begin{aligned} & \text { Met } \\ & 730 \end{aligned}$ | Gly | Leu | Gly | Glu | $\begin{aligned} & \text { Pro } \\ & 735 \end{aligned}$ | Ser |



```
<210> 5
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
    cDNA amplification
<400> 5
cagctccaca acctacatca ttccgt
<210> 6
<211> 12
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
        cDNA amplification
<400> 6
acggaatgat gt
<210> 7
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
    cDNA amplification
<400> 7
gtccatcttc tctctgagac tctggt
<210> 8
<211> 12
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
    cDNA amplification
<400> 8
accagagtct ca
<210> 9
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
```

```
            cDNA amplification
<400> 9
ctgatgggtg tcttctgtga gtgtgt
<210> 10
<211> 12
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
    cDNA amplification
<400> 10
acacactcac ag
<210> 11
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
        cDNA amplification
<400> 11
ccagcatcga gaatcagtgt gacagt 26
<210> 12
<211> 12
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
    CDNA amplification
<400> 12
actgtcacac tg
<210> 13
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
    cDNA amplification
<400> 13
gtcgatgaac ttcgactgtc gatcgt
26
<210> 14
<211> 12
<212> DNA
```

```
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:adapter for
    cDNA amplification
<400> 14
acgatcgaca gt```

